

# RIODINIDAE OF RONDÔNIA, BRAZIL: A NEW SPECIES OF *THEOPE* (LEPIDOPTERA: RIODINIDAE)

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**ABSTRACT.**— A new riodinid, *Theope turneri* n. sp., is described from the vicinity of Cacaúlândia, Rondônia, Brazil, and a list of *Theope* species collected in the area to date is presented.

**KEY WORDS:** Amazon, Brazil, diversity, Ecuador, Neotropical, South America, taxonomy, *Theope turneri* n. sp.

Over the last eight years an unprecedented number of collecting hours has been spent amassing butterfly material from the Cacaúlândia area of Rondônia in Brazil, resulting in the accumulation of a diverse inventory that includes over 300 riodinid species (Emmel and Austin, 1990; DeVries, 1997; unpublished data). The first author has recently described several taxa in *Theope* Doubleday, 1847, from private and public collections as a result of ongoing revisional work (Willmott and Hall, 1994; Hall and Willmott, 1996; DeVries and Hall, 1996). Among the Rondônia material an unnamed species of *Theope* was discovered, which is formally described below.

## *Theope turneri* Hall & Austin, new sp.

Fig. 1a-b; 2

**Description.**— **MALE:** forewing length 13.5mm. *Dorsal surface:* forewing ground color brown; small semicircular dull blue area extending from wing base halfway towards tornus, only a few scales extending into lower edge of discal cell. Hindwing ground color brown; small triangular dull blue area extending from wing base to just distal of discal cell end to anal margin, where scales are paler blue. *Ventral surface:* both wings pale gray-brown; small submarginal black spots, each surrounded by triangle of gray, more prominent at tornus, extending around hindwing and probably forewing (forewing margins tattered). Labial palpi brown. Eyes bare and brown. Frons black. Antennae brown, ringed with white, clubs black. Thorax and abdomen dorsal surface black, ventral surface gray-brown. *Genitalia* (Fig. 2): uncus elongate with a triangular indentation at lower posterior corner; upper part of valvae long and projecting; aedeagus uniformly tubular, vesica studded with tiny sclerotized structures.

**FEMALE:** not known with certainty (but see discussion below).

**Type.**— *Holotype* ♂: BRAZIL.— Rondônia, Linha C-25, off B-65, 12.5 km south of Cacaúlândia, 21 Mar 1991 (G. T. Austin); to be deposited at the Universidade Federal do Paraná, Curitiba, Brazil.

**Etymology.**— It is our pleasure to name this butterfly after J. D. Turner and his family for their untiring devotion to preserving and studying the butterflies of Rondônia.

**Diagnosis.**— On the basis of sharing a long upper arm to the valvae of the male genitalia, *Theope turneri* n. sp. belongs in a

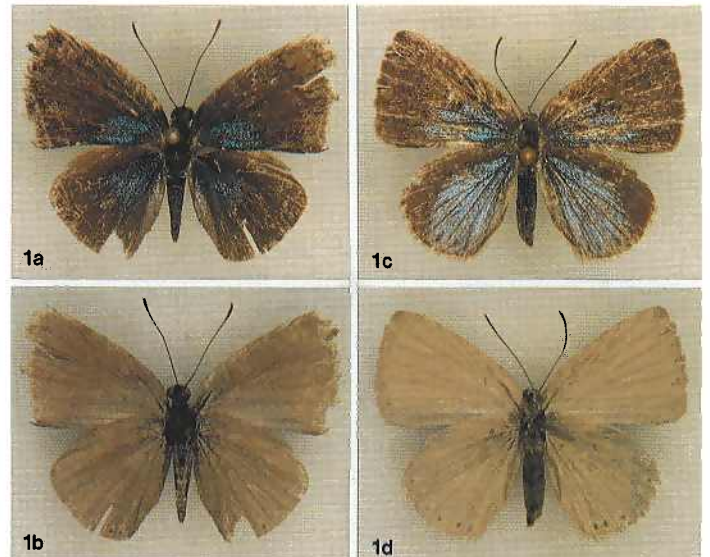


Fig. 1. *Theope turneri* Hall & Austin n. sp., holotype male: a) dorsal surface; b) ventral surface. Putative female: c) dorsal surface; d) ventral surface.

group that includes *Theope brevignoni* Hall & Willmott, *T. foliorum* Bates, *T. atima* Bates, *T. methemona* Bates, and *T. leucanthe* Bates. Its uncus is shaped like those of *T. foliorum*, *T. atima* and *T. methemona*, but its valvae lack the basal hump on the upper arm of those species and are thus more like those of *T. leucanthe* which shares the most similar aedeagal morphology. Phenotypically, *Theope turneri* differs from the other species in this group by having a more rounded and compact wing shape and markedly reduced blue on both dorsal wing surfaces.

**Discussion.**— No specimens of *Theope turneri* have been found in the world's major museum collections, so the male holotype is unique. However, a female specimen collected within a few kilometers of the male by O. Gomes, at Rio Pardo, in August 1994, has a phenotype which closely approximates that of the male. It is figured here (Fig. 1c-d) as the putative female of *Theope turneri*. Although *Theope foliorum* and *T. leucanthe* are

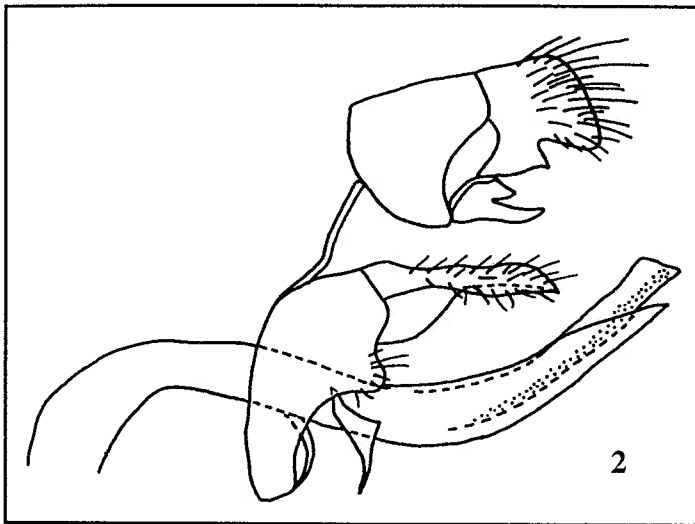


Fig. 2. Male genitalia of *Theope turneri* Hall & Austin n. sp.

reasonably well represented in collections, the remaining members of the group are very rare and thus it is not surprising that this new species is still known only from a single male. Indeed, other members of the group from lowland Amazonia are still in need of description (Hall, in prep.).

#### REMARKS

Below we append a list of the 18 *Theope* species collected in the Cacaulândia area to date. This is the largest published list for a single site, although the first author has recorded 22 species from a single locality at the base of the eastern Andes in Ecuador (Hall and Willmott, unpublished data) and an analysis of species distributions indicates that as many as 30 species might be expected to occur at any single west Amazonian locality. Collections from the Rondônia area are noticeably depauperate in species of the *T. pedias* group (typically characterized by a yellow ventral surface), possibly due to a lack of appropriate hill or ridge tops where males of these species can be found perching.

*Theope* Doubleday, 1847

- acosma* Stichel, 1910
- comosa* Stichel, 1911
- decorata* Godman & Salvin, 1888
- eudocia* Westwood, 1851
- foliorum* Bates, 1868
- guillaumei guillaumei* Gallard, 1996
- hypoleuca* Bates, 1868
- leucanthe* Bates, 1868
- lycaenina* Bates, 1868
- pedias* Herrich-Schäffer, [1853]
- phaeo* Prittwitz, 1865
- sobrina* Bates, 1868
- terampus* (Godart, [1824])
- thebais thebais* Hewitson, 1860
- theritas* Hewitson, 1860
- thestias* Hewitson, 1860
- thootes* Hewitson, 1860
- turneri* Hall & Austin, n. sp.

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